

What is claimed is:

1. An electrostatic chuck comprising:

5 a circular ceramic plate having an electrostatic attractive electrode;

a mounting surface for supporting a wafer formed on one of the main surfaces of the circular ceramic plate;

10 an annular gas groove formed on the periphery of the mounting surface in the form of concentric circles and a gas inlet which communicates with the annular gas groove; and

a circular gas recess formed inside the circular ceramic plate, and a gas inlet which communicates with the circular gas recess,

15 wherein the annular gas groove and the circular gas recess are independently separated from each other by a first annular rib protrusion with a plurality of dotted protrusions being disposed within both the annular gas groove and the circular gas recess.

20 2. The electrostatic chuck according to claim 1, wherein the circular gas recess has a diameter which is set to 70 to 95% of the outer diameter of the mounting surface.

25 3. The electrostatic chuck according to claim 1, wherein the first annular rib protrusion surrounded by the outer circumference of the circular gas recess and the inner circumference of the annular gas groove has a width in a range

of 0.5 to 5 mm, and an second annular rib protrusion surrounded by the outer circumference of the mounting surface and the outer circumference of the annular gas groove has a width in a range of 1 to 5 mm.

5 4. The electrostatic chuck according to claim 1, wherein:
the ratio $S1/S2$ of the area $S1$ of the circular gas recess to a total area $S2$ of the upper surfaces of the dotted protrusions disposed inside the circular gas recess is set in a range of 1 to 5; and

10 the ratio $S3/S4$ of an area $S3$ of the annular gas groove to a total area $S4$ of the upper surfaces of the dotted protrusions formed inside the annular gas groove is set in a range of 1 to 5.

15 5. The electrostatic chuck according to claim 1 wherein the circular ceramic plate has a heating element for heating the wafer buried in the ceramic plate or attached to the other main surface of the ceramic plate.